to the theory, this phase-advancing of the melatonin cycle is what causes clinical remission in these patients.

Others, however, point out that many of these patients show improvement if given light in the middle of the day or in the evening—times at which melatonin secretion is virtually nil and when light would not cause a phase-advance in melatonin circadian rhythms. The mechanism by which bright light causes clinical effects must therefore be due to another nonmelatonin pathway. At present, no satisfactory explanations for this midday effect exist.

Questions on how best to administer light partly hinge on the explanation used. Proponents of the phase-shift theory recommend that light be given in the early morning, but others think that the timing of the light—morning versus evening versus afternoon—is probably irrelevant. At least 2,000 and preferably 2,500 lux of light is necessary. With the "light boxes" commercially available, patients need to sit 1 m (3 ft) from the light source. No room lights are ever bright enough to cause clinical improvement. Most investigators recommend that at least two hours of light be administered daily. A clinical response is typically seen within days to one week, faster than responses seen with the use of antidepressants. If the light therapy is discontinued while patients are still vulnerable to depression (typically before March or April), they frequently relapse quickly, usually within days.

Current research is focusing on psychopharmacologic treatments of seasonal affective disorder, the use of light for nonseasonal depressions, and further clarification of light's therapeutic mechanism of action.

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Intractable Depression in Tertiary Care

ALMOST ALL STUDIES of antidepressant use show a consistent response rate of 60% to 70%. Such results are achievable with the first or second trial of standard heterocyclic antidepressants, if therapeutic doses are achievable and the medication trial lasts four to six weeks. An apparent nonresponse should first be addressed by reevaluating for depressogenic factors, especially concurrent medication use—clonidine hydrochloride, β-blockers, methyldopa, reserpine, and birth control pills—and occult hypothyroidism. Blood concentrations provide useful information for only a few antidepressants—nortriptyline hydrochloride, imipramine hydrochloride, desipramine hydrochloride—because of the paucity of well-controlled studies. Once the above considerations have been met, patients can be defined as treatment resistant, and a systematic approach for subsequent interventions is then required. The following treatment regimen should be considered: adding lithium carbonate, adding a stimulant, the use of a monoamine oxidase inhibitor, the use of alprazolam, and electroconvulsive therapy. There are no modern studies that directly compare the relative efficacy of these interventions for intractable depressions—other than electroconvulsive treatment and monoamine oxidase inhibitors—so the choice of order is left to clinical judgment. Lithium is added to the heterocyclic antidepressant therapy at dosages needed to achieve therapeutic serum concentrations—about 0.5 to 1.0 mEq per liter—or at some centers a standard 900 mg per day is used. From 30% to 50% of patients may be expected to respond over a period of four to six weeks of combined treatments, are maintained on both for the usual 9 to 12 months, and then the dosages are tapered.

A monoamine oxidase inhibitor may be either added to, or used instead of, a heterocyclic antidepressant. Two such drugs, phenelzine sulfate or isocarboxazid, are now commonly added to a heterocyclic antidepressant regimen, but combinations with tranylcypromine sulfate have been associated occasionally with adverse effects. More than 70% of patients who apparently do not respond to heterocyclic antidepressant medication have been responsive if adequate dosages of monoamine oxidase inhibitors are used, such dosages commonly exceeding 75 mg a day of phenelzine or 50 mg a day of isocarboxazid or tranylcypromine.

Although there are few double-blind trials, many recent case series document the efficacy and safety of stimulants as antidepressant agents. This is particularly so for patients with medical illnesses, where response rates may approach 70%. Side effects are remarkably rare, as is any tendency for patients to abuse the agents. The common dosage range of methylphenidate is 5 to 20 mg twice a day and of amphetamine, 2.5 to 15 mg twice a day. They commonly are added to a regimen of heterocyclic antidepressants and may decrease the incidence of the development of tolerance.

Several large well-controlled studies have found alprazolam to be effective for depression at mean dosages of 3.0 mg per day, with a wide variance. Improvement occurred over three to six weeks. While alprazolam does not have the common heterocyclic side effects on the cardiovascular system and parasympathetic systems, its dosage should be tapered slowly to avoid possible withdrawal symptoms.

Electroconvulsive therapy appears to be the modern treatment of choice for severe or intractable depression, with typical response rates of 90% using modern computerized equipment. Accepted practice now would include it as an early intervention before all possible pharmacotherapeutic combinations are tried.

The adjunctive use for an antidepressant response of tryptophan, phenylalanine, thyroid hormone, estrogen, reserpine, yohimbine, and carbamazepine is not yet well documented.

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Reporting Elder Abuse

ALTHOUGH ESTIMATES on the prevalence of elder abuse vary, it is thought to be at least as common as child abuse. Victims are typically older than 75 years, women, and either physically or mentally disabled. Victims of abuse often come to

the attention of health providers who may have an obligation to report the problem.

Over the past ten years most states have adopted mandatory reporting laws for elder abuse. Definitions of abuse and reporting requirements may vary from state to state, but many are patterned after those developed in California. Although elder abuse is broadly defined in California to include physical abuse, neglect, mental abuse, and exploitation, only physical abuse that includes battery, sexual assault, and unreasonable physical restraint has a mandatory reporting requirement. Other forms of abuse may be reported, but there is no legal requirement to do so.

Instances of elder abuse may be reported to the police or to the county adult protective services office nearest the victim's residence. Some counties in California have "elder abuse hotlines" to provide information or take reports. All telephoned reports must be followed up by a written report using an elder-abuse reporting form, which should be available in hospital social work offices or from adult protective services offices. Anyone who reports elder abuse is immune from any criminal or civil actions, and failure to report physical abuse can result in a fine, imprisonment, or both.

Caring for victims of elder abuse is generally a team effort. A careful medical evaluation and the identification of factors that led to the abusive situation by a trained social worker are important. Reporting elder abuse is an important first step in providing relief for the victim, mobilizing community resources, and documenting what promises to be a growing problem.

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Treatment of Chronic Pain With Psychotropic Drugs

THE USE OF psychotropic drugs in the management of chronic pain is widespread. The associated symptoms of depression, anxiety, and agitation that often accompany the principal physical symptom of pain have naturally led to the use of antidepressant and tranquilizing agents. In a recent survey, tricyclic antidepressants were used by nonpsychiatric physicians 30% of the time for pain compared with 56% for treating depressions.

Many other psychotropic drugs, such as the neuroleptics, chlorpromazine and lithium carbonate, have been used enthusiastically but with varying results. Monoamine oxidase inhibitors are effective, but their use is limited by substantial food and drug interactions. Only the tricyclic antidepressants have routinely proved effective. In numerous clinical trials these medicines produce a measurable improvement in patient functioning and pain reduction of about 66% compared with 33% for placebo. Even cortical evoked potentials in experimentally produced pain in human subjects responded as well to the use of imipramine hydrochloride as to meperidine hydrochloride.

The possible mechanism of action to account for the success of the antidepressants has been reviewed. Many think that chronic pain is simply a depression-equivalent disorder and therefore responsive to the use of antidepressants. Studies with animal models, however, have shown the potent analgesic properties of these drugs.

For treatment, the more serotonergic antidepressants such as amitriptyline hydrochloride, imipramine hydrochloride, and doxepin hydrochloride are preferred by most clinicians. The fact that these drugs are sedating can be used to great advantage when they are given at bedtime. Some patients will prefer the adrenergic antidepressants such as desipramine hydrochloride and nortriptyline hydrochloride. The usual dose varies from 25 mg to 100 mg at bedtime. Trazodone hydrochloride, a nontricyclic antidepressant with minimal anticholinergic side effects, has been used with excellent results in more than 200 patients.

Primary care providers must not expect any psychotropic medicine by itself to treat chronic pain. Success requires a comprehensive management of the whole patient and a thoughtful tactical plan emphasizing patients' active participation.

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Social Rehabilitation of Schizophrenia

PSYCHOSOCIAL REHABILITATION has been shown to augment antipsychotic medication regimens in improving the course and outcome of schizophrenia. Antipsychotic medication can diminish symptoms—especially the specific symptoms of the disorder—and rehabilitation efforts can reduce or compensate for social and occupational disability and handicaps. Rehabilitation strategies assume two forms: educational and skill-building methods to increase patients' behavioral repertoires, and supportive methods to buffer the stressful effects of environmental demands and to provide social aids for overcoming disabilities.

Social skills training has been used in both hospital and community settings to facilitate patients' acquiring and maintaining interpersonal behaviors. Using instructions, modeling, behavioral rehearsal, feedback, and homework, a wide range of interpersonal and coping skills can be taught in a modular format with prescribed content areas and learning exercises. A skills training module consists of a trainer's manual, a patient's workbook, and a professionally produced videotape for demonstrating the desired skills. Because they are highly structured and prescriptive in their methods, modules can be used by an array of professionals and paraprofessionals to teach such relevant skills as medication self-management, symptom self-management, grooming and self-care, social problem solving, family coping, and conversation. Specific skills are taught; for instance, in medication management, patients learn the therapeutic and side effects of neuroleptic medication, how to monitor drug benefits and side effects, and how to negotiate medication issues with a physician. Skills training has been useful in vocational rehabilitation—that is, training participants in job-finding and job-maintenance skills.

Strategies have been developed to improve the family's